



An Energy Efficiency Workshop & Exposition

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Kansas City, Missouri

# The Competitive Generation Market

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Vice-President

Corporate Planning

St. Louis MO





# Topics

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- **Ameren Corporation**
- **Competitive Generation Market Issues**
  - Transmission
  - Generation
  - Natural Gas
  - Interactions
- **Customer Choice in Illinois**
  - Services Unbundled
  - Key Provisions
  - Business Structure
  - California in Illinois ?

# *Ameren Corporation*

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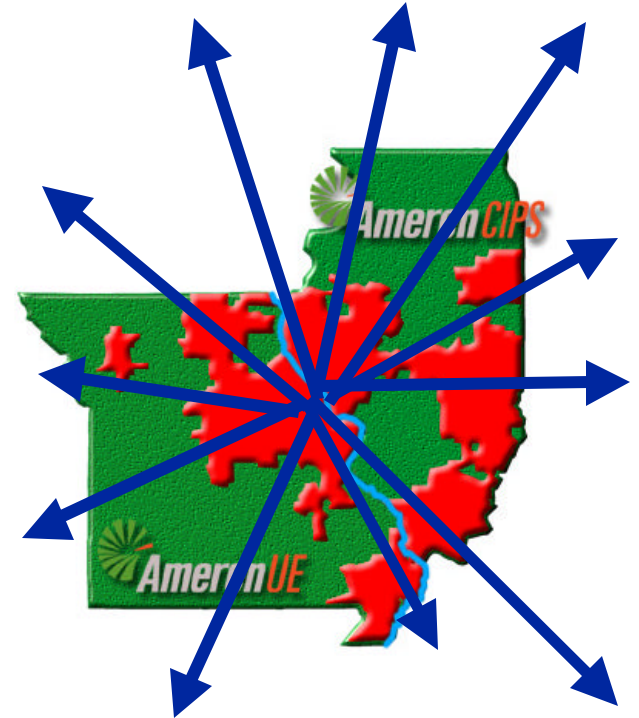


**With assets of \$10 billion, Ameren serves 1.5 million electric customers and 300,000 natural gas customers in a 44,500-square-mile area of Missouri and Illinois.**

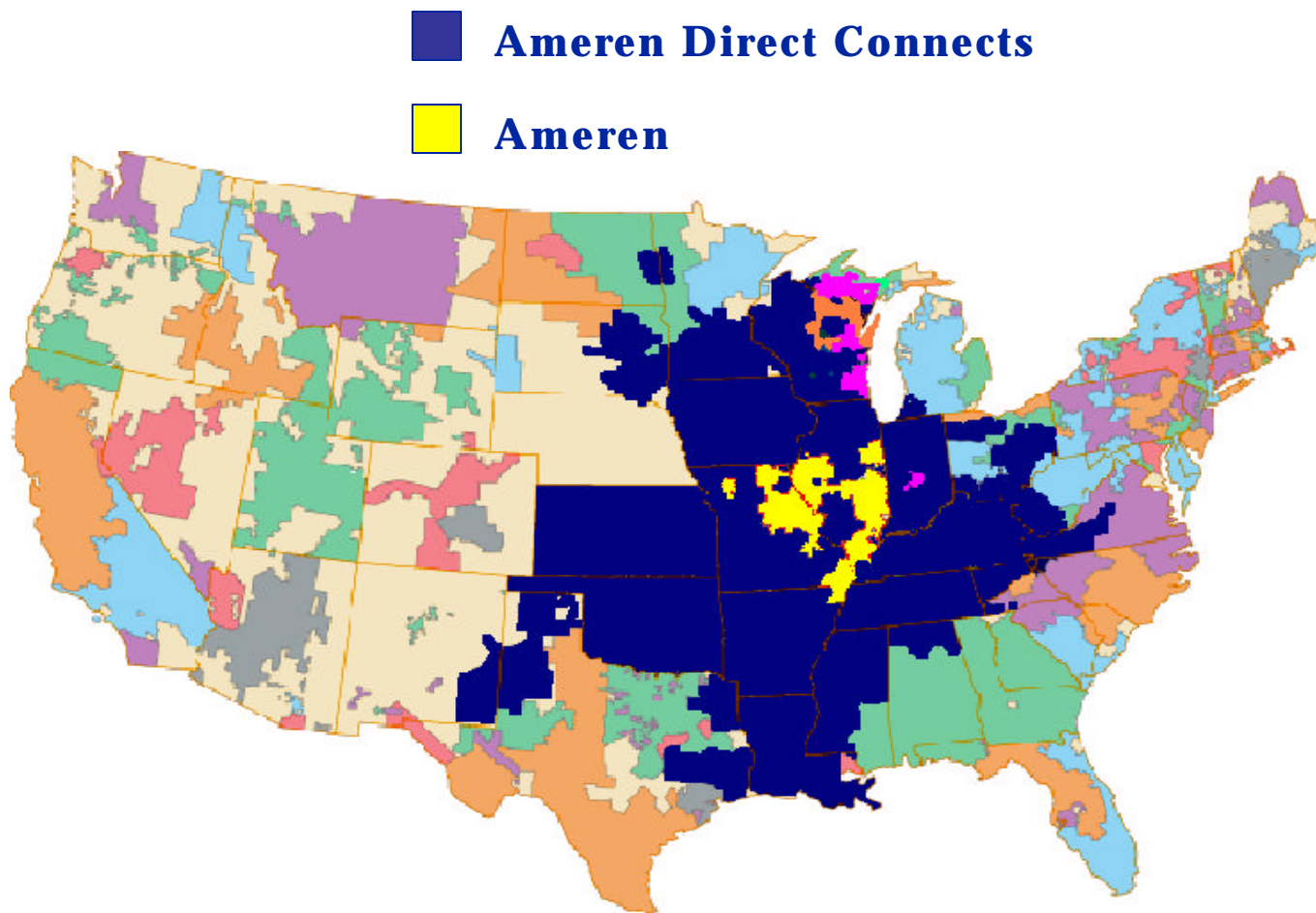
# *Ameren Transmission System*

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- Ameren interconnected to 28 other electric systems
- Central geographic location
- Power transfer across Ameren in any direction



# *Ameren Transmission Reach*



# ***Ameren Transmission Capability***

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- U.S. and Ameren transmission systems designed for utility's unique service area
- Adequate to serve all load within Ameren service territory
- Subject to transmission network's physical limits





## ***Ameren Transmission Capability***

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- FERC ordered open access in 1996
- Some facilities heavily subscribed
- Point to point movement may be limited
- Some transmission requests denied
- Result -- constraint issue





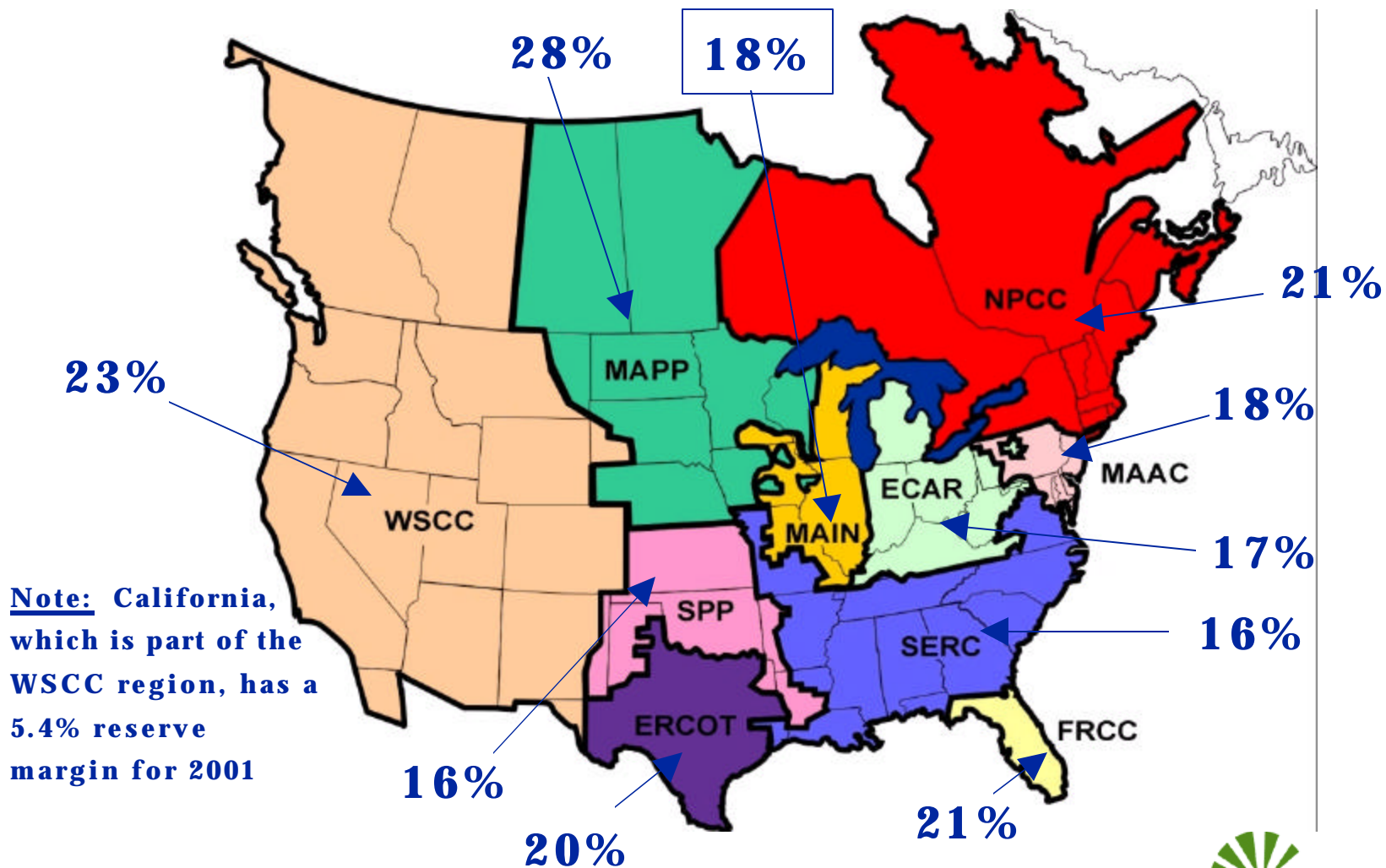
# ***Ameren Transmission Investment***

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- Investment in transmission upgrades
  - Improve import capabilities
  - Accommodate new generation
  - Enhance competition
- Benefits
  - Increase reliability
  - Lower price



# NERC Regions / Reserve Margins





## ***U.S.A. Generation Outlook***

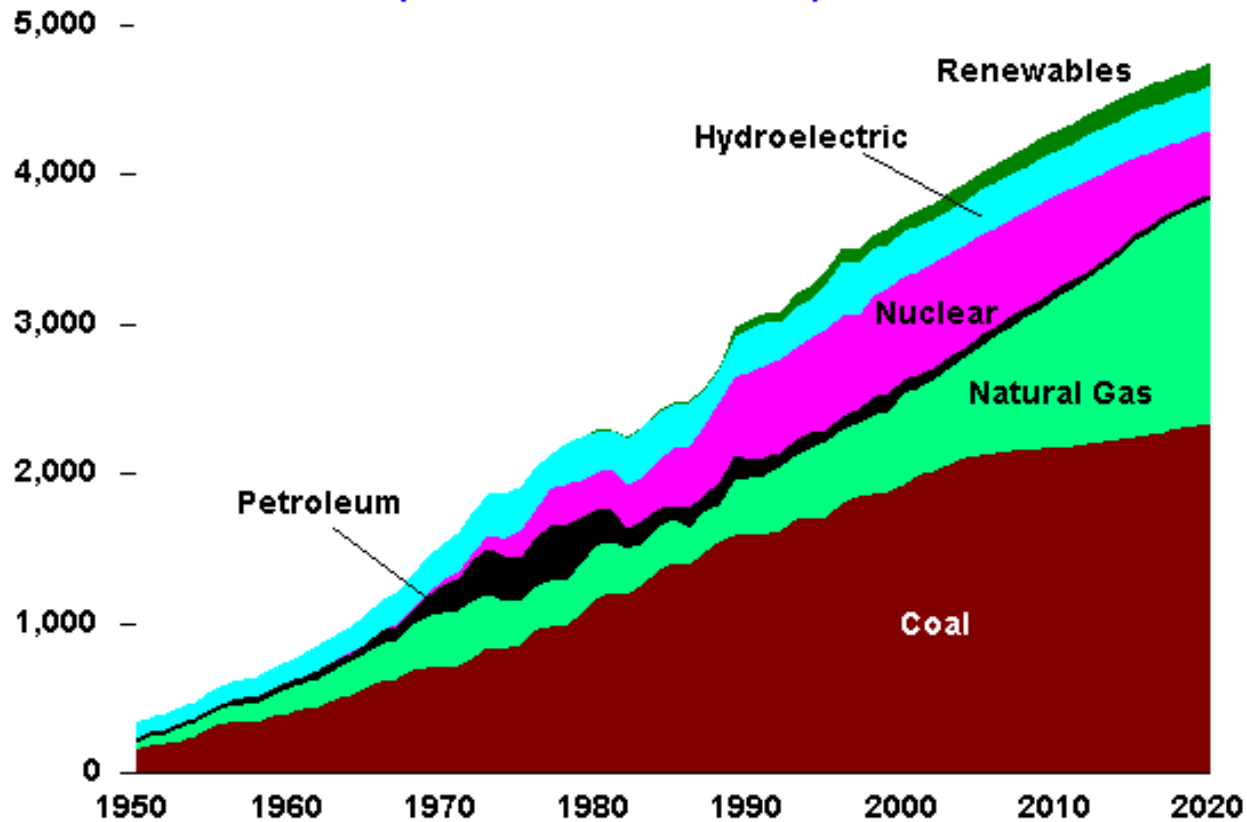
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- DOE estimates electric demand growing 2% per year
- Replacements for plant retirements
- Gas-fired generation: Today's solution



# *U.S.A. Generation by Fuel*

**Electricity Generation by Fuel, 1950-2020  
(billion kilowatthours)**



Source: EIA

June 3-6, 2001

[www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov)



### o Benefits

- Low capital costs
- High efficiency
- Low emissions
- Short lead times
- Proven reliability
- Flexibility





# *Natural Gas Prices*

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## **Gas Prices**

- Dramatic increase in price and volatility in 2000
- NYMEX futures prices reach \$10 per MMBtu
- Citygate points in CA and NY reach \$15 -\$30
- Natural gas futures market becomes one of world's most volatile commodity markets



# ***Natural Gas Supply***

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## **Midwest**

- Crossroads of Interstate Pipelines
- Access to major production basins

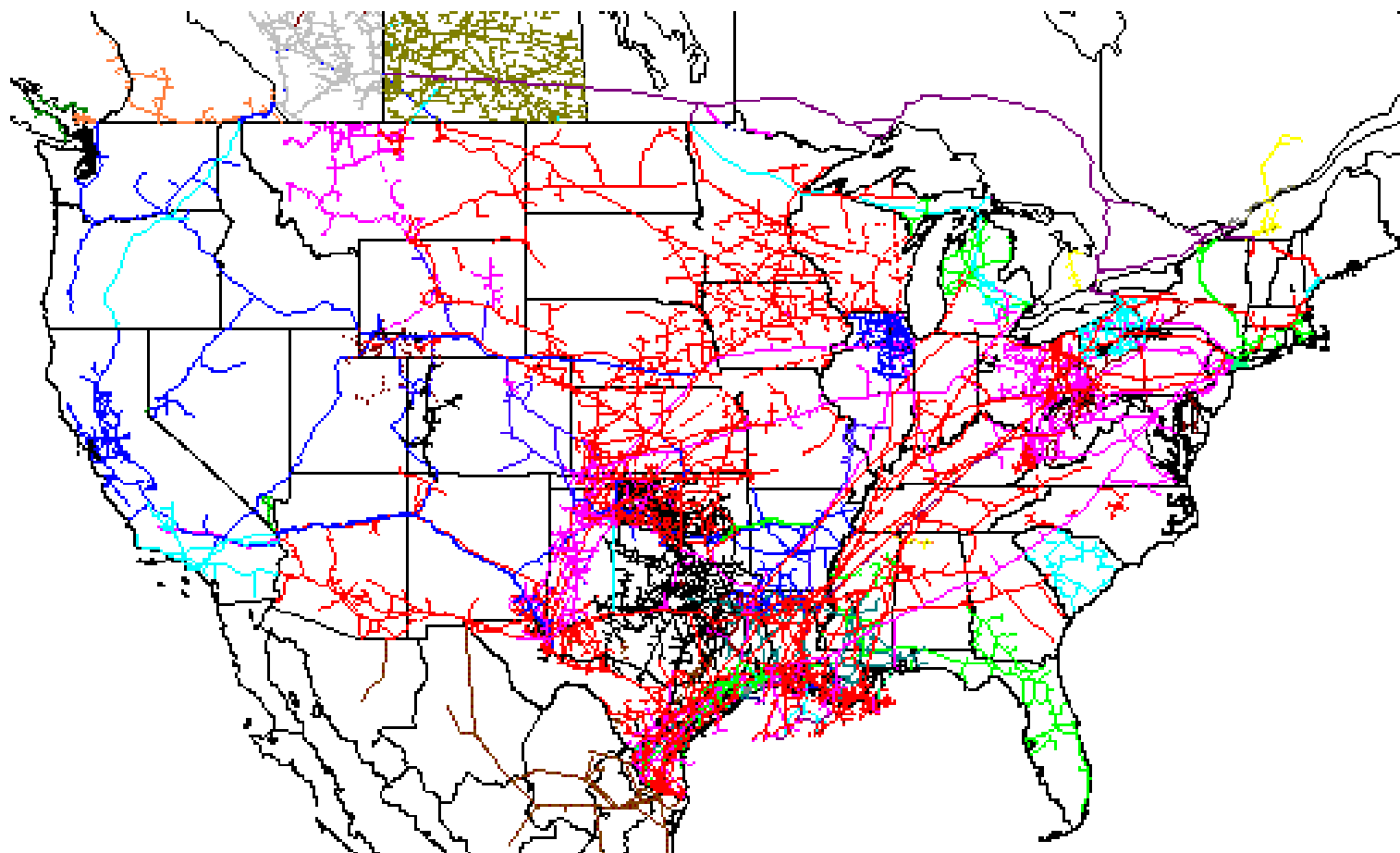
## **National**

- Inadequate supply in areas of constrained pipeline capacity - - CA, NY, FL



# *Natural Gas Pipeline System*

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June 3-6, 2001

[www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov)





## ***Natural Gas Supply***

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- Estimates from 60 to 200 year supply
- Low prices in 90's inhibited capital investment in exploration
- Exploration now reaching peak capacity



## **Convergence**

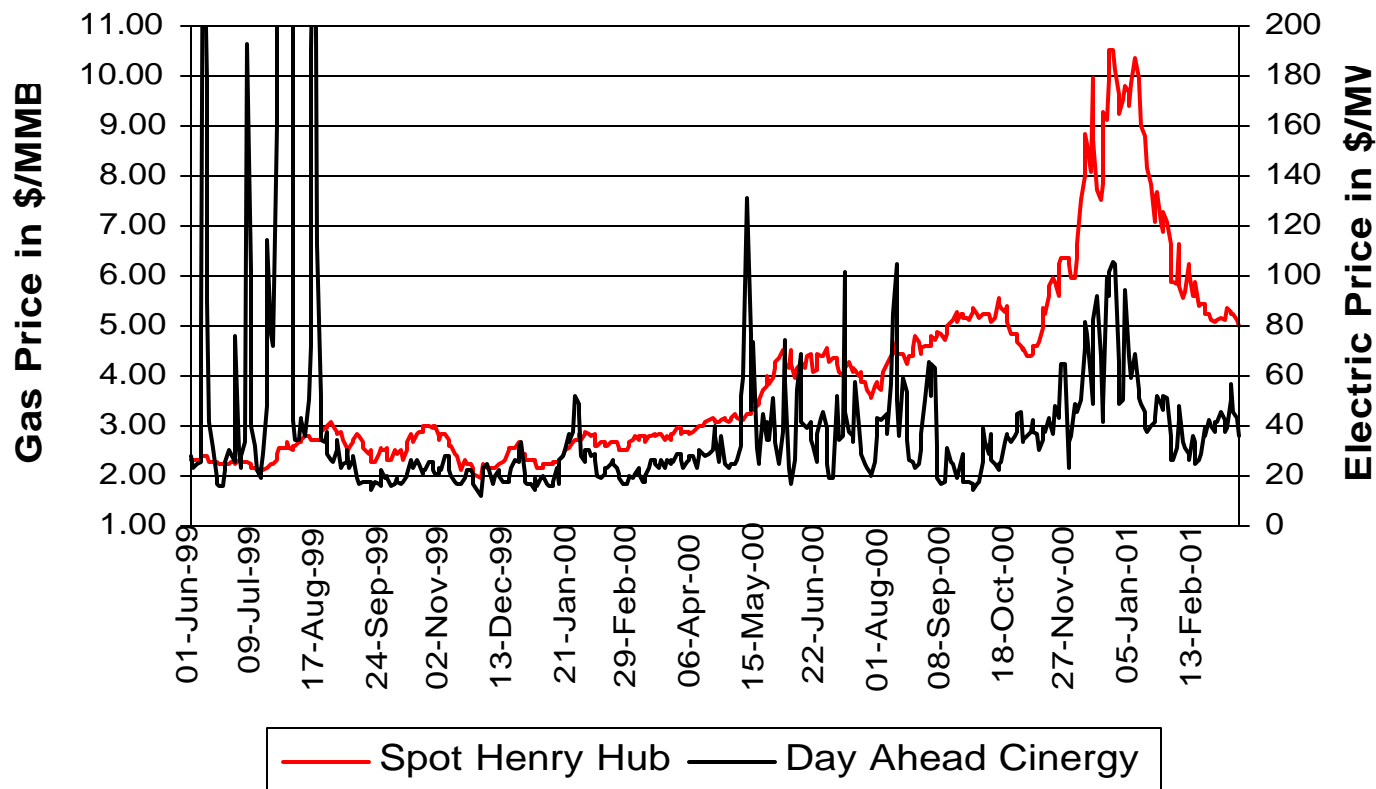
- Fuel accounts for large % of gas-fired costs
- Gas-fired sets marginal costs in peak periods
- Price of gas setting price of electricity

## **Price Relationships**

- Spot prices: electricity and gas

# Price Relationships

## Comparison of Spot Gas to Daily Cinergy





## ***Customer Choice in Illinois***

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- Traditional Business Unbundled
- Components Open to Competition:
  - Generation
  - Billing / Customer Care
  - Metering
- Market opened: Oct. 1999 and Dec. 2000



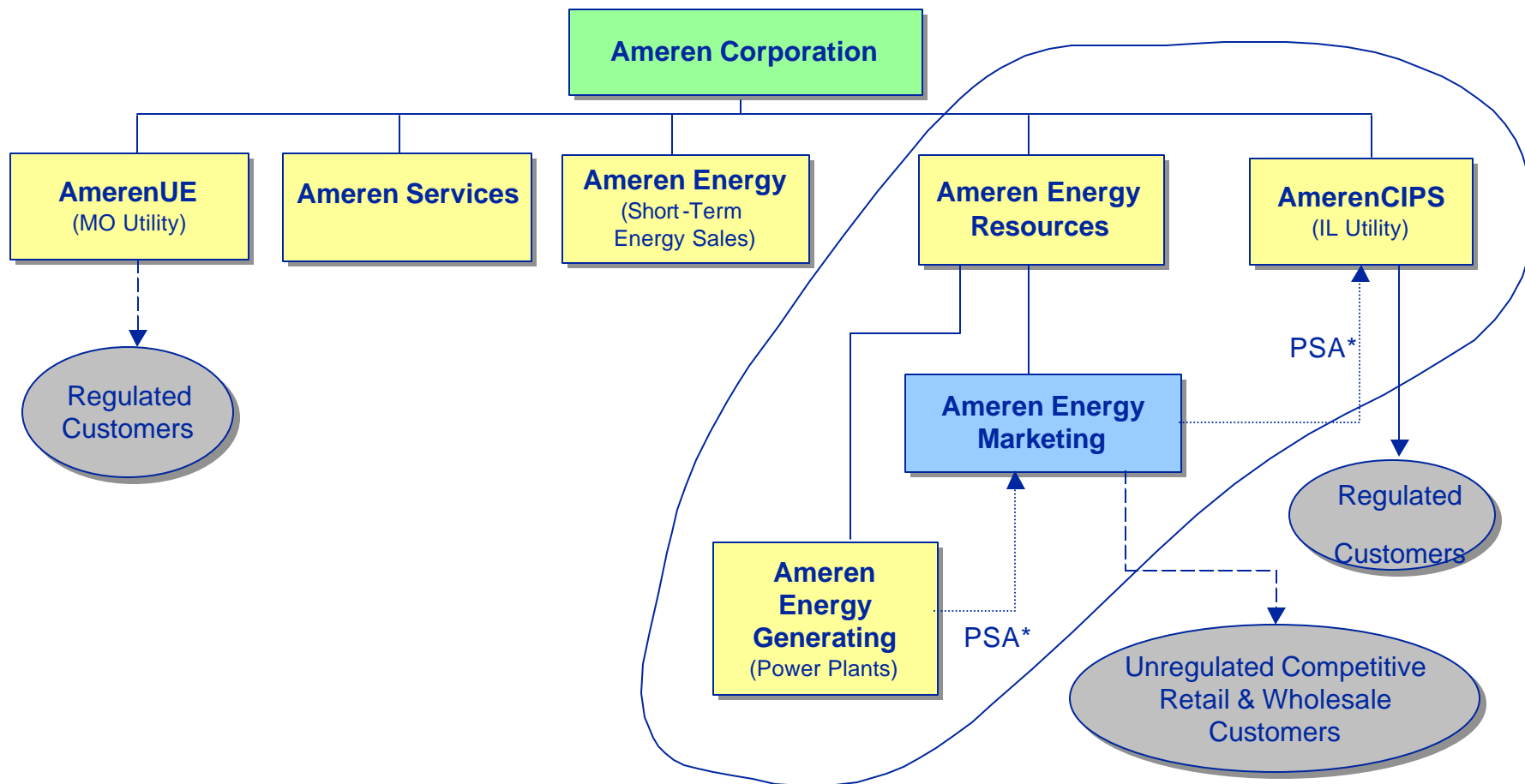
## *Key Provisions*

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- Utility remains provider of last resort
- Suppliers must be certified
- Transition charge
- Mandatory market-based tariff
- Utilities required to enter into long-term supply contracts



# Business Structure



\* Power Supply Agreement

June 3-6, 2001





## *California in Illinois ???*

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- o No forced plant sale
- o No forced spot market purchases
- o No supply deficiency
- o No net import from other states
- o No over-reliance on natural gas